

ABSTRACT OF THE DISCLOSURE

A wideband distributed or feedback amplifier monolithic microwave integrated circuit (MMIC) is disclosed that contains an integrated group delay equalizer circuit to compensate for the group delay variation of the amplifier circuitry. The MMIC amplifier is capable of achieving a predicted constant group delay with little variation over a wide frequency range. In addition, the group delay equalizer circuit enables the amplifier to achieve flat (constant) gain over a wide bandwidth, while maintaining constant group delay. Furthermore, the group delay equalizer circuitry requires only a small portion of the total MMIC area.